

REMARKS

Responsive to the objection to Claim 5 in paragraph 2 of the Office Action, Claim 5 has been amended to depend from Claim 1. In addition, Claim 5 along with Claims 2 and 4 have been amended to more clearly correspond in terminology to Claim 1 from which they depend.

With respect to the rejection under 35 U.S.C. § 102(b) of Claims 1, 2 and 4 in paragraph 6 of the Office Action as being anticipated by Stearns et al, Claim 1 has been amended to distinguish Claims 1, 2 and 4 over this reference. In particular, Claim 1 has been amended to specify that the first link in the stride adjustment mechanism is lengthened in order to lengthen the horizontal portion of the elliptical path. This differs substantially from the action on the first link 430 in Figs. 4-7 of Stearns et al, as identified by the Examiner in the Office Action. To begin with, the first link 430 is described at col. 7, lines 62-65 as being a rigid member. Secondly, the operation of the apparatus 400 in Figs. 4-7 is entirely different, as described in detail in col. 7, line 62 to col. 9, line 32, than the claimed apparatus. Instead of altering the elliptical path by lengthening the first link, the apparatus in Stearns et al utilizes a pair of actuators 497 and 498 in combination with a second rigid link member 440 to change the various rotational axes B1-B11 which in turn have the effect of altering the elliptical path. As a result, Claim 1 as amended along with dependent Claims 2 and 4 are not anticipated by Stearns et al.

The rejection under 35 U.S.C. § 102(b) of the remaining Claims 10, 12, 17, 18, 20 and 22 in paragraph 6 of the Office Action as being anticipated by Stearns et al is respectfully traversed. In particular, Stearns et al does not disclose all of the elements of the claimed invention. For example, Stearns et al does not disclose a speed sensor operatively connected to a control system as set forth in Claim 10. In addition, Stearns et al does not disclose a user input and display system having a display for displaying exercise data as claimed. As indicated at col. 8, lines 30-35,

the interface 406 merely indicates the status of the actuators 497 and 498.

Therefore, Stearns et al does not anticipate Claims 10, 12 , 17, 18, 20 and 22.

The 35 U.S.C. § 103(a) rejection of Claims 5-23 as being unpatentable over Stearns et al in view of Whan-Tong et al as set forth in paragraph 6 of the Office Action is respectfully traversed. In particular, there is a fundamental difference between what is being claimed and what is taught by the cited references. Specifically, Claims 5-23 all claim in one form or another the concept of using an exercise apparatus control system to adjust stride length as a function of various types of information including pedal speed, user data and apparatus operating parameters. Stearns et al only discloses an input device 407 that can be used to manually adjust the elliptical path. Whan-Tong et al merely discloses the concept of using a control system to control the lift mechanism 38 so as to maintain a "desired workout level." See, col. 9, lines 24-28 and col. 9, line 63 to col.10, line 15. As illustrated in Fig. 13 of Whan-Tong, the lift mechanism 38 only varies the inclination of the ellipses 181-183 and does not affect stride length. Contrary to the contention of the Examiner, it would not have been obvious to input additional parameters into the Stearns et al control system because there is nothing in either reference that would suggest or provide motivation for such a combination. For, example, neither reference recognizes the advantages of adjusting stride length as a function of speed. Because an elliptical apparatus has a foot motion similar to walking or running and because the faster a person runs or walks the longer his stride will be, the claimed apparatus provides a significant advantage over the cited art with respect to user comfort by increasing stride length as a function of speed. Similarly, by using a control system to adjust stride length in response to such information as desired speed, level of resistive force, user height, user weight and direction of pedaling where natural stride length varies can provide substantial advantages in terms of user comfort and exercise efficiency. The object in the apparatus of Whan-Tong is to maintain a workout level as opposed to the object of the claimed invention to compensate for various factors with respect to stride length. Neither Whan-tong

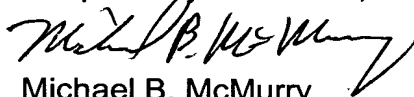
et al or Stearns et al provide any suggestion of such advantages or desirability of adjusting stride length as claimed and as a result the invention claimed in Claims 5-23 can not be considered obvious in view of these references.

Accompanying this paper is a Supplemental Information Disclosure Statement. It is respectfully requested that the references listed on the attached PTO Form-1449 be considered during examination of the application.

It is believed that no fee is due for this paper. However, if an additional fee is due please charge Deposit Account No. 13-2495 for any such fees incurred herein.

Therefore, it is respectfully requested that the amendment to Claims 1, 2, 4 and 5 be entered and that this application issue to Letters Patent with Claims 1-23 forming a part thereof.

Respectfully Submitted,



Michael B. McMurry
Reg. No. 26,954

March 3, 2004

1210 Astor Street
Chicago, Illinois 60610

(312) 664-1086